REMARKS

The Examiner is thanked for the thorough examination of the present application and the withdrawal of previous rejections based on Ishii and Klaassen. The Office Action, however, has continued to reject all examined claims 1-4 and 7-10. For at least the reasons set forth herein, Applicant respectfully request reconsideration and withdrawal of the rejections.

The Office Action rejected claims 1-3 and 8-9 as allegedly obvious over the combination of deCarmo (US 6,381,404) in view of Sasaki (US 6,838,454). Applicant respectfully requests reconsideration of this rejection.

Claim 1 recites:

> 1. A method for playing back optical videodisc by using an optical disc drive, the method comprising the following steps:
> a. reading video data from an optical videodisc at highest possible speed of the optical disc drive;
> ***b. storing the video data to a non-volatile storage device***;
> ***c. halting the operation of the optical disc after the reading process has completed in order to avoid the unnecessary free running during idling time for power saving purpose;***
> d. according to a video playing speed, ***a video play back device continuously acquiring and playing back the video data from the non-volatile storage device***;
> e. outputting the video data to a video display unit.

(*Emphasis added*.) Claim 1 patently defines over the cited art for at least the reason that the cited art fails to disclose the features emphasized above.

In this regard, DeCarmo and Sasaki fail to teach the claimed features of "halting the operation of the optical disc after the reading process has completed in order to avoid the unnecessary free running during idling time for power saving purpose" and

"according to a video playing speed, a video play back device continuously acquiring and playing back the video data from the non-volatile storage device".

The Office Action admits that deCarmo fails to teach "halting the operation of the optical disc after the reading process has completed…." The Office Action, however, cites col. 1, lines 26-38 of Sasaki as allegedly teaching this feature. Applicant respectfully disagrees.

This portion of Sasaki actually states:

> When a CD-ROM drive or the like operates for reproduction, it reads information from a disk mounted on it, while making the disk revolving at the maximum speed (maximum revolutions per second), in order to read necessary information as quickly as possible from the disk. ***If the disk drive remains inoperative for reading from the disk for a preset period, it sets the disk revolving at low speed. If the disk drive still remains inoperative for reading for a further longer preset period, it stops the disk.*** By controlling the disk revolution in this way, low power consumption and noise reduction designed for CD-ROM drives or the like are achieved. By way of example, a typical CD-ROM drive structure is represented in a block diagram shown in FIG. 1.

Sasaki does not teach the claimed feature of ***"halting the operation of the optical disc after the reading process has completed in order to avoid the unnecessary free running during idling time for power saving purpose***." Instead, Sasaki teaches that the disk drive is halted only after it has been inoperative for a period of time after the read operation. That is, Sasaki specifically teaches that a read operation is performed, and the disk drive continues to spin. Then, after a preset period, the disk drive slows to revolve at a low speed. Then, after a further preset period of time of inoperativeness (i.e., no further read operations), the disk drives stops revolving.

In contrast to this, the claim 1 specifically defines halting the operation of the optical disc after the read operation "in order to avoid unnecessary free running during

idling time for power savings." That is, claim 1 defines embodiments that DON'T idle through the "preset" periods described in Sasaki.

Therefore, even if Sasaki could be properly combined with deCarmo, the resulting combination does not teach all features of claim 1, and for at least this reason, the rejection should be withdrawn.

In addition, the Office Action admits that neither deCarmo nor Sasaki teaches the claimed non-volatile storage device. However, the Examiner took "official notice of the non-volatile storage device since it is well known in the art." While Applicant does not disagree with the statement that non-volatile storage devices are well known, Applicant does traverse the rejection. In this regard, just because something is "well known in the art" does not mean that such an element can be combined at will with other elements. The legal precedent surrounding 35 U.S.C. § 103 still requires that there be some proper suggestion or motivation to make the combination. The Office Action has not alleged any such motivation. Instead, the Office Action merely stated that "it would have been obvious … to increase the storage capacity for the system." (see e.g., Office Action, p. 4)

This rationale is both incomplete and improper in view of the established standards for rejections under 35 U.S.C. § 103.

In this regard, the MPEP section 2141 states:

> Office policy has consistently been to follow *Graham v. John Deere Co.* in the consideration and determination of obviousness under 35 U.S.C. 103. As quoted above, the four factual inquires enunciated therein as a background for determining obviousness are briefly as follows:
>
> (A) Determining of the scope and contents of the prior art;

(B) Ascertaining the differences between the prior art and the claims in issue;

(C) Resolving the level of ordinary skill in the pertinent art; and

(D) Evaluating evidence of secondary considerations.

...

BASIC CONSIDERATIONS WHICH APPLY TO OBVIOUSNESS REJECTIONS

When applying 35 U.S.C. 103, the following tenets of patent law must be adhered to:

(A) The claimed invention must be considered as a whole;

(B) The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination;

(C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention and

(D) Reasonable expectation of success is the standard with which obviousness is determined.

Hodosh v. Block Drug Co., Inc., 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986).

The foregoing approach to obviousness determinations was recently confirmed by the United Stated Supreme Court decision in KSR INTERNATIONAL CO. V. TELEFLEX INC. ET AL. 550 U.S. ___ (2007)(No. 04-1350, slip opinion, p. 2), where the Court stated:

> In Graham v. John Deere Co. of Kansas City, 383 U. S. 1 (1966), the Court set out a framework for applying the statutory language of §103, language itself based on the logic of the earlier decision in Hotchkiss v. Greenwood, 11 How. 248 (1851), and its progeny. See 383 U. S., at 15–17. The analysis is objective:
>
> "Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented." Id., at 17–18.

Simply stated, the Office Action has failed to at least (1) ascertain the differences between and prior art and the claims in issue; and (2) resolve the level of ordinary skill in the art. Furthermore, the alleged rationale for combining the two references (i.e., "it would have been obvious … to increase the storage capacity for the system) embodies clear and improper hindsight rationale. In this regard, from a storage capacity standpoint, there is no difference between volatile and non-volatile memory. That is, why would non-volatile memory allow increased storage capacity (as alleged by the Office Action)? This clearly reflects a misplaced rationale for forming the rejection and the rejection should consequently be withdrawn.

For at least these additional reasons, Applicant submits that the rejection of claim 1 is improper and should be withdrawn.

Further still, the Office Action cites "column 5, lines 48-column 6, line 5" of deCarmo as allegedly teaching the claimed feature of "*storing the video data to a non-volatile storage device*." In fact, this portion of deCarmo teaches:

> ***The DVD player loads data fetched during a read-ahead operation into a cache 150 of memory 120 prior to its processing and/or decoding***. Memory caching is well known in the computer arts as well as in the DVD Specification. The fetched data can be stored in the cache 150 until it is needed. Read-ahead operations are useful in that they are designed to maintain sufficient data in the cache to enable playback to continue uninterrupted even while the microprocessor is servicing interrupts. Unfortunately, conventional read-ahead operations can be limited or prevented altogether due copy-protection techniques. As described above, such techniques can prevent conventional read-ahead techniques from reading data blocks that cross title boundaries into titles that the DVD player is not authorized to play. Further information regarding caches for DVD players and problems associated with copy protected content can be had with reference to a co-pending, commonly-assigned U.S. Pat. application, Ser. No. 09/122,967, entitled "A Host-Based Caching Method and System for Copy Protected Content," filed by Linden A.

> DeCarmo. (The disclosure of that application is incorporated herein by reference.) The invention pertains to a novel technique for performing read-ahead operations and storing data in the cache of the DVD player, particularly where, e.g., title keys possessed by the player will not permit read-ahead operations to cross title boundaries.

(*Emphasis added*). As reflected in the foregoing, deCarmo fails to disclose the claimed feature of storing a large amount of video data to a non-volatile storage device. Instead, deCarmo teaches that the **DVD player loads data fetched into a cache** [see column 5, lines 48-56]. However, the cache used in deCarmo is a volatile module and the capacity of the cache is too small to store all data on the DVD disc [see Fig. 2]. In other words, claim 1 of the present application was unforeseeable at the time of application by deCarmo, and thus, deCarmo fails to teach that data can be cached to a non-volatile storage device from the disc, the operation of the optical disc is stopped after the reading process has completed, and then the video data is displayed from the storage device. For at least this reason, the rejection should be withdrawn.

In addition, DeCarmo teaches that the DVD player loads data fetched during a read-ahead operation into a cache 150 of memory 120 prior to its processing and/or decoding. Furthermore, the DVD player loads data fetched into a cache (see col. 5, lines 48-56). However, the cache or memory used in DeCarmo is a volatile module in which data may **disappear from the memory when the player shuts down**, rather than a non-volatile storage device as claimed in independent claim 1.

Further still, in contrast to claim 1, DeCarmo is **unable to retrive any data from the memory after the operation is stopped.** Therefore, DeCarmo also fails to teach the claimed feature of "**continuously acquiring and playing back the video data from the non-volatile storage device**".

As yet an independent basis for traversing the rejection of claim 1, Applicant respectfully traverses the combination of Sasaki with deCarmo. This combination was made on the alleged basis that it would have been obvious "to read-ahead using the maximum speed to read … and to stop the disk after the reading is done to lower the power consumption and noise…" However, as discussed above, Sasaki does not teach the stopping of the disk immediately after the read operation. Instead, it specifically teaches waiting for two preset periods (one preset period until is reduces the disk to a lower revolution speed and a second preset period before stopping the disk). Consequently, the alleged motivation is not actually taught in the prior art, but is merely subjectively alleged by the Examiner (reflecting improper hindsight rationale). For at least this additional reason, the rejection of claim 1 should be withdrawn.

For at least the foregoing reasons, claim 1 patently defines over the applied combination of references, and the rejection of claim 1 should be withdrawn. As claims 2-4 and 7-9 depend from claim 1, the rejections of these claims should be withdrawn for at least the same reasons.

The Office Action rejected claim 10 under 35 U.S.C. § 103(a) as allegedly unpatentable over the combination of deCarmo in view of Sasaki and further in view of Holt. Applicant respectfully requests reconsideration and withdrawal of this rejection. In this regard, independent claim 10 recites:

> 10. A method for playing back optical videodisc by using an optical disc drive, the method comprising the following steps:
> a. reading video data from an optical videodisc at highest possible speed of the optical disc drive;
> ***b. storing the entire video data to a non-volatile storage device;***

c. halting the operation of the optical disc after the reading process has completed in order to avoid the unnecessary free running during idling time for power saving purpose;

d. according to a video playing speed, ***a video play back device continuously acquiring and playing back the video data from the non-volatile storage device***;

e. outputting the video data to a video display unit;

f. ending the output of the video data;

g. outputting the video data directly from the non-volatile storage device.

(*Emphasis added*). Claim 10 patently defines over the cited art for at least the reason that the cited art fails to disclose the features recited above.

In short, deCarmo and Sasaki are applied in the same manner as they were applied to claim 1, with respect to elements b, c, and d. Applicant respectfully traverses this application of deCarmo and Sasaki for the same reasons discussed above in connection with claim 1. For at least this reason, the rejection of claim 10 should be withdrawn.

In addition, Applicant disagrees with the further combination of Holt. Applicant has set forth relevant legal standards above, which govern the combination of references. In short, there must be some motivation or suggestion for making the purported combination. In combining Holt with deCarmo and Sasaki, the Office Action merely alleged that the further combination would have been obvious in order "to increase the resolution data in the storage device." The last element of claim 10, however (the element that Holt is applied as allegedly teaching), has nothing to do with increasing resolution of data in a storage device. Accordingly, the purported motivation is misplaced and the rejection should therefore be withdrawn.

CONCLUSION

In view of the foregoing, it is believed that all pending claims are in proper condition for allowance.

Should the Examiner have any questions regarding this response, the Examiner is invited to telephone the undersigned attorney at (770) 933-9500.

No fee is believed to be due in connection with this amendment and response to Office Action. If, however, any fee is believed to be due, you are hereby authorized to charge any such fee to deposit account No. 20-0778.

Respectfully submitted,

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